pipe therefrom, so that said outlet pipe is kept completely filled with passing pulp,

- directly transporting said shredded pulp from said outlet pipe of said pulp shredding vessel to a reaction vessel through a gas-tight conduit, which is gas sealed from the surroundings, the interior of said conduit communicating with the interior of said outlet pipe and with the interior of said reaction vessel;

- bleaching said shredded pulp in said reaction vessel through reaction with ozone gas; and

- regulating the gas pressure in said pulp shredding vessel and the gas pressure in said reaction vessel so that ozone gas is prevented from leaking upstream through said outlet pipe.

12. (NEW) A method according to claim 11, further comprising keeping the gas pressure in said pulp shredding vessel higher than the gas pressure in said reaction vessel.

13. (NEW) A method according to claim 12, further comprising regulating the pressure difference between the gas pressure in said pulp shredding vessel and the gas pressure in said reaction vessel towards a predetermined value.

14. (NEW) A method according to claim 13, further comprising keeping the gas pressures in said pulp shredding vessel and said reaction vessel below the surrounding atmospheric pressure.

15. (NEW) A method according to claim 11, further comprising transporting said shredded pulp by gravity in said gas-tight conduit.

16. (NEW) A method according to claim 11, further comprising shredding said pulp in said pulp shredding vessel by a transport screw with at least one toothed transport thread, and transporting said shredded pulp by said transport screw through said outlet pipe of said pulp shredding vessel.

17. (NEW) A system for treatment of pulp, comprising:

a dewatering device for dewatering said pulp to a fiber concentration of at least 20%,

a pulp shredding device for shredding said dewatered pulp, said pulp shredding device including a closed pulp shredding vessel, an outlet pipe from said pulp shredding vessel, and a transport means adapted to continuously transport said shredded pulp without compressing the pulp out of said pulp shredding vessel through said outlet pipe, so that said outlet pipe is kept filled with passing pulp,

a reaction vessel for bleaching said shredded pulp through reaction with ozone gas,

a conduit gas sealed from the surroundings and connecting said outlet pipe of said pulp shredding vessel gas-tight to said reaction vessel, so that the interior of said outlet pipe directly communicates with the interior of said reaction vessel through the interior of said conduit,

and a pressure regulation device for regulating the gas pressure in said pulp shredding vessel and the gas pressure in said reaction vessel so that ozone gas is prevented from leaking upstream through said outlet pipe.

18. (NEW) A system for treatment of pulp according to claim 17, wherein said pressure regulation device is adapted to maintain the gas pressure in said pulp shredding vessel higher than the gas pressure in said reaction vessel.

19. (NEW) A system for treatment of pulp according to claim 18, wherein said transport means comprises a transport screw extending in said pulp shredding vessel and provided with at least one toothed transport thread for shredding the pulp.

20. (NEW) A system for treatment of pulp according to claim 19, wherein said transport screw also extends in said outlet pipe of said pulp shredding vessel.

21. (NEW) A system for treatment of pulp according to claim 17, wherein said pressure regulation device regulates the pressure difference between the gas pressure in said pulp shredding vessel and the gas pressure in said reaction vessel towards a predetermined value.

22. (NEW) A system for treatment of pulp according to claim 21, wherein said pressure regulation device comprises a